I. **OVERVIEW**

The following information will appear in the 2009 - 2010 catalog

**AUBDY-302** *Automotive Collision Repair 2*  
*Prerequisite: Satisfactory completion of AUBDY 301 with a minimum grade of C or better.*  
*Mandatory Fee Required*

This course is designed for the intermediate student who has successfully completed AUBDY 301 with emphasis on Automotive plastics, structural repairs, corrosion protection, vehicle dimensions, and estimating damage. Field trips might be required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Plastic and composite repairs
      1. Types of materials
      2. Safety procedures
      3. Adhesives
      4. Structural and non structural repairs
      5. Removal and replacement
   
   B. Corrosion protection
      1. What is corrosion
      2. Anticorrosion materials
      3. Safety procedures
      4. Basic surface preparation
      5. Corrosion treatments
      6. Acid rain damage
      7. Industrial fallout damage
   
   C. Passenger compartment service
      1. Passenger compartment assemblies
      2. Interior trim
      3. Dash panel service
      4. Instrument cluster service
      5. Locating air and water leaks
      6. Rattle elimination
   
   D. Welded panel replacement

Division: Technical Education  
Printed on: 11/03/2009 05:08 PM
1. Welded panels
2. Removing welded panels
3. Preparing panels for welding
4. Structural sectioning
5. Replacing panels with adhesive

E. Vehicle damage measurement
   1. Impact and its effects on a vehicle
   2. Measurement of body dimensions
   3. Tram gauges
4. Centering gauges
   5. Diagnosing damage
   6. Computer measuring systems

F. Estimating repair costs
   1. Parts prices
   2. Labor costs
   3. Refinishing time
   4. Estimate total
   5. Costumer and Insurance Relations

2. Required Lab Content:
   a. Plastic and Composite Repairs
      i. Repair and Replacement
   b. Corrosion Protection
      i. Surfacing Preparation
      ii. Anticorrosion Materials
   c. Passenger Compartment Service
      i. Repair and Replacement
   d. Welded Panel Replacement
      i. Spot Weld Removal
      ii. Panel Removal
      iii. New panel Installation
   e. Vehicle Dimensions
i. Tram Gauges
ii. Diagnosing Damage
iii. Computer Measuring Systems

f. Estimating Repair Costs
   i. Analyze
   ii. Evaluate
   iii. Calculate

B. **ENROLLMENT RESTRICTIONS**

1. **Prerequisites**
   Satisfactory completion of AUBDY 301 with a minimum grade of C or better.

2. **Requisite Skills**
   *Before entering the course, the student will be able to:*
   a. Describe fundamental terms used in the collision repair industry.
   b. Analyze, evaluate, and manipulate the repair or replacement of non-structural steel panels.

C. **HOURS AND UNITS**

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<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
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<tbody>
<tr>
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<tr>
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D. **METHODS OF INSTRUCTION (TYPICAL)**
   *Instructors of the course might conduct the course using the following method:*
   1. Present weekly lectures through the use of power point presentations and DVD presentations.
   2. Discuss chapter content and review homework in class to ensure students have knowledge prior to assigned lab activities correlated to lectures and NATEF standards
   3. Modeling trade techniques, during lab, as it relates to the application of non structural repairs.

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**
   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   a. Weekly
i. Reading Assignments
ii. Homework Chapter Assignments
iii. NATEF Lab Sheets

b. Bi Monthly
   i. Content Review and Study for Quizzes

c. Mid Term
   i. Content Review and Study for Exam

d. Final
   i. Content Review and Study for Final Exam

2. **EVIDENCE OF CRITICAL THINKING**
   
   Assignments require the appropriate level of critical thinking

   a. Describe the two major categories of plastics and how to identify the different types.
   
   b. Identify and list the functions of a typical passenger compartment.
   
   c. Summarize four basic safety rules to follow when working with anti-corrosion compounds.
   
   d. Explain seven steps in a basic collision damage diagnosis procedure.
   
   e. Describe the function of the California Bureau Automotive Repair.
   
   f. Perform a compete damage report including all labor, part prices, paint materials, and sales tax.

F. **TEXTS AND OTHER READINGS (TYPICAL)**
   

III. **DESIRED LEARNING**

A. **COURSE GOAL**
   As a result of satisfactory completion of this course, the student should be prepared to:

   Enter into the automotive collision repair industry as an entry level technician.

B. **STUDENT LEARNING GOALS**
Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**  
   Upon satisfactory completion of this course, the student will be able to:
   
   a. Identify and perform procedures used in automotive plastic and composite repairs.
   b. Explain and choose correct procedures for corrosion protection to meet manufacturer’s specifications.
   c. Analyze, evaluate and estimate vehicle collision damage.

2. **Lab Learning Goals**  
   Upon satisfactory completion of the lab portion of this course, the student will be able to:
   
   a. Demonstrate the correct procedure used in plastic adhesive repairs.
   b. Demonstrate correct procedures for corrosion protection to meet manufacturer’s specifications.
   c. Analyze, evaluate, and estimate vehicle collision damage.
   d. Perform the necessary steps for removing and replacing a welded body panel.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**

   1. Bi-monthly Quizzes
   2. NATEF task sheets
   3. Instructor observation

B. **SUMMATIVE ASSESSMENT**

   1. Midterm exam
   2. Final exam